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GAMES AND ACTIVITIES WITH THE SPACE AND IN THE SPACE AS WAY TO EXPLORE THE ARCHITECTURE

GRY I ZABAWY Z PRZESTRZENIĄ I W PRZESTRZENI JAKO ŚRODEK DO POZNAWANIA ARCHITEKTURY

S u m m a r y

The article presents the project "Science in Space", which was implemented in secondary schools in Wielkopolska in the second half of 2014. It discusses the realization of scenarios proposed in the project, points to the successes and difficulties in conducting workshops on architecture, and presents the author's conclusions drawn from the experience gained through those workshops.

Keywords: science in space, study of architecture, architectural workshops, lesson scenario, middle school

S t r e s z c z e n i e

Autorka w swoim artykule przedstawia projekt „Nauka w przestrzeni", który był realizowany w gimnazjach i liceach na terenie Wielkopolski w drugiej połowie 2014 roku. Omawia realizację scenariuszy, które zaproponowała w ramach projektu. Wskazuje na sukcesy i trudności przy realizacji projektów warsztatowych dotyczących architektury. Wyciąga wnioski z doświadczenia zebranego podczas zajęć z gimnazjalistami.

Słowa kluczowe: nauka w przestrzeni, nauka architektury, scenariusz lekcyjny, warsztaty architektoniczne, gimnazjum

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1. Ah, this architecture...

The living environment of modern man is intertwined with architecture, as we have contact with it repeatedly – every day at every hour and minute. Often a person feels much better in an urban environment than in nature. At the same time, during the whole education process (from preschool to high school) it is not taught as an autonomous subject. Architecture, according to the official curriculum, is one of the components of visual arts classes (in rather numerous company) and some other courses comprise elements of the history of architecture. In the author's opinion, the effect of such an approach on children's and youngster's education in the field of architecture is its 'invisibility'. And since imperceptible elements are not assessed, it does not matter whether they are good or bad, pretty or ugly etc. Consequently, most people do not pay attention to the surrounding buildings, both existing and emerging. Only few struggle for the quality of architecture in their vicinity. In response to this long-term lack of spatial education, the "Science in Space" project was created.

2. "Learning in Space"

The "Learning in Space" project was executed under the "Paths of Copernicus" grant of the Ministry of Science and Higher Education. From the organizational side it was hosted by Poznan University of Technology, the Association of Architects, and the Foundation of Architecture Creators. The main objective of the project was to draw the attention of young people (secondary and high schools) to the space that surrounds them. It was carried out under the supervision of professionals (academic staff, architects and enthusiasts of architecture), who, by joining forces with teachers, showed the mechanisms occurring in the surrounding space in workshops. Working in teams of two (a teacher and a specialist), they created innovative programs of educational activities. The versatility of the scenarios created in this way allow for their use in the future. It is worth noting that in order to develop these scenarios their creators did not have to meet in person. A special web platform was created for the exchange of information. It operated in two ways – an architect interested in landscape architecture could find a teacher eager to take advantage of his/her knowledge in their classroom or a teacher could suggest a topic for their lessons and a specialist in given area could join the team.

The whole process began with registration on the online platform. Then each participant could either create their own project or join an existing one (only two people could participate in each project). The next step was to fill in the scenario template with the following points:

1. issues in the course
2. a thematic path
3. the idea for the scenario (synopsis)
4. compliance with the core curriculum
5. convergence with textbooks
6. goal of the classes – what a student knows and what they can do after completing the course
7. the work plan for the preparation of classes
8. the course of lessons
9. the teaching methods and work techniques
10. evaluation
11. bibliography

Proper preparation of the script allowed for the transition to the next stage – implementation, which was to be held in two lesson hours (2x45 minutes). In the author's intention, the scenarios created (ready for use and always available on the internet platform) are to provide help for teachers nationwide to carry out interesting lessons related to architecture and surrounding space even without the presence of a professional.

Most activities related to the project were held in the first semester of the school year 2014/2015. In December 2014 a conference summarizing the project was carried out.

3. Games and activities with architecture

Within the framework of "Learning in Space", the author realized two separate scenarios at the Stanislaw Kostka Public Catholic Secondary School. For the purposes of gaining substantially different experience it was decided to conduct workshops in cooperation with two different teachers leading two different subjects. It was also decided to guide it on two different levels of difficulty: concrete and abstract.

3.1. Scenario No.1 – "With architecture through the ages..."

Lessons conducted according to the first scenario were carried out in collaboration with Mrs. Anna Bielawska MA (history teacher, social studies). The primary objective was to familiarize secondary school students with architectural styles. The class was divided into five groups and each group had to build a physical model of an assigned building. Students received prepared materials for the following: Romanesque – Tum near Leczyca; Gothic – Notre Dame Cathedral in Paris; Renaissance – Villa Rotonda; Baroque – Fara church in Poznan; Classicism – Palace on the Water, Łazienki Park in Warsaw. The materials contained proper plans, sections and elevations drawn up at a scale of 1:100 (with the exception of Notre Dame Cathedral) as well as a few photos (Ill. 2).

The author expected students to respond positively to the different, unusual form of the lesson, and that they would enjoy creating the models. Indeed, this was the case with the majority of the twenty six students in this class.

One of the groups, building the basilica in Tum near Leczyca, did not even require any help. Very soon a group leader was spontaneously singled out. He had good spatial imagination and with only a few hints could efficiently construct a model. The next two groups, building the Villa Rotonda and the Palace, required more help from the author, although finally they succeeded. Creating the model of Notre Dame Cathedral in Paris proved to be very difficult. The last group, dedicated to Fara, had problems with the commencement of work, expected a lot of help, and generally approached the whole idea of creating models negatively. In the end, the scenario exceeded the assumed turnaround time and increased from two to three lessons. Most importantly, the models were created (Ill. 4) and thanks to the uniform scale, the students could see the differences in building size and compare different architectural styles. As part of their homework they had to learn about a given building and present the most important information to the rest of the class. Moreover, by analysing 'their' building, they had to determine the key characteristics of a particular architectural style.

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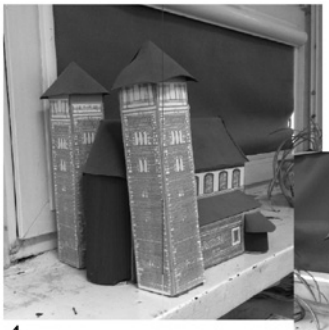

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Ill. 1. Photo of the scenario “I feel the space!”, photo J.B.-D.
Ill. 2. Photo of the scenario “With the architecture through the ages...”, photo J.B.-D.
Ill. 3. Photo of the scenario “I feel the space!”, photo J.B.-D.
Ill. 4. Model of the basilica in Tum near Leczyca, photo J.B.-D.
Ill. 5. Model of the basilica in Tum near Leczyca, photo J.B.-D.

3.2. Scenario No. 2 – “I feel the space!”

The second scenario was carried out with another class and in collaboration with Mrs. Marta Dzięcioł (tutor) (Polish teacher, educator). It was designed to draw attention to the neighbourhood space around us. For this workshop a theoretical introduction was necessary, thus, at the beginning of the class, students tried to answer a few questions: what is architecture and interior design,

what is the space and can we distinguish between its types, etc. In the first part of the workshop, participants constructed cardboard walls in the classroom, which formed different types of spaces (tight, narrow, low, high, empty and crowded). The use of cardboard boxes allowed for quick and easy modelling of spatial situations. In second part of the workshop, students painted boxes with basic colours: white, black, red, yellow, blue and built with them again (Ill. 1, Ill. 3).

The aim of the course was to define the space in which the individual feels best. It was important that students could learn from direct experience, they could discover in what type of space they feel good, how colour affects the perception of a given space, etc.

Pre-lesson assumptions proved to be difficult to implement due to the large number of pupils (twenty four), who unfortunately did not listen carefully to instructions, nonetheless all the planned situations were completed. However, kids at this age tend to follow, so if the loudest person opposed the whole idea, it was hard to establish any creative relationship with the rest of the group; therefore only a few pupils drew conclusions and shared them with the rest of the class

In summary, the first scenario was an imitative game with architecture, which allowed pupils to experience the scale of objects, note their diversity as well as to distinguish and describe the characteristics of architectural styles. It was hard work, even physically, which brought tangible results (physical models) that would serve others in history classes (Ill.5). The second scenario was more difficult to carry out due to the assumed interactions with pupils and the lack of tangible results.

4. Conclusion

A few months after the realization of the scenarios the experience was summed up. Several questions were put up on this occasion: is it worth playing with schoolkids in the study of architecture/architectural space, whether it is worthwhile engaging in projects bringing architecture closer to pupils, whether architects should go out to the people to teach about architecture/space, and should architecture appear as a subject in school.

The experience from the ‘Learning in Space’ project shows that the answers to those questions are not clear. The first scenario shows that it is possible to efficiently and effectively mobilize children and youngsters to experience architecture, in particular the history of architecture. The specific tasks in this scenario were completed, bringing measurable results, but at the same time leaving little room for exercising creativity. The second example shows that an excess of creativity can make an activity difficult to carry out, moreover it is impossible to assess its impact on the students’ state of mind. It can be assumed that the process was initiated in the head of each participant to pay more attention to their immediate vicinity, e.g. by consciously choosing the colours of the walls in their rooms.

After analysing the scenarios it is obvious that it is much easier to carry out planned activities in smaller groups, therefore it was easier to conduct the first scenario as work proceeded in subgroups and was specific. It can be assumed that what seemed to be an asset before implementation (two different groups and two modes of action, and so a broader context of activity) proved to be a disadvantage. Working with one group in two ways might give better results. Moreover, the combination of concrete and creative activities is probably the best combination in the long term, where the degree of difficulty increases with the age of the participants.

It is very difficult to determine whether schools should receive an additional subject dealing only with architecture. On the one hand, the pupils schedule seems to be heavily overloaded for many years and additional classes would not be accepted with enthusiasm. On the other hand, the quality of the surrounding architecture indicates that it is necessary to establish a long-term educational program for architecture. In the majority of the population there is a lack of knowledge of the fact that a harmonious environment has a positive effect on the individual's psychophysical condition. Therefore, we should put more emphasis, e.g. in the art classroom, on the perception of surrounding architecture.

Professor Slawomir Ratajski stressed in his speech for the Second Program of the Polish Radio that art and music classes are 'one of the most important elements affecting the quality of society'[1] [1], they cause the development of innovative attitudes. Therefore it is important to 'go with architecture amongst the people', especially to children and young people, who are the future of our country. And, how research has shown that children learn most through play, so let's play architecture with them.

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